

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:-:

1           1.     An exercise device of the class of expander type exercisers and strand pulling  
2 exercisers in which an elastic member that is capable of expansion and contraction is disposed  
3 between a pair of handgrips that are configured to expand the elastic member for physical workout  
4 exercises by a user, said exercise device comprising:

5           (a) a first handgrip and a second handgrip;

6           said first handgrip comprising a first handle portion configured to be held by a user;

7           said second handgrip comprising a second handle portion;

8           each handle portion comprising a first plane;

9           said first plane comprising a substantial vertical plane when a corresponding handle portion  
10 is held by a hand of a user;

11          each handle portion comprising a grooved base portion connected to a corresponding handle  
12 portion and configured with a groove opening to mount a plurality of roller elements;

13          each grooved base portion disposing a corresponding groove opening in the direction remote  
14 from a corresponding handle portion;

15          (b) a first group of at least four grooved roller elements mounted in said first grooved base  
16 portion;

17          a second group of at least four grooved roller elements mounted in said second grooved base  
18 portion;

19          each grooved roller element of said first and second grooved roller elements groups having  
20 a longitudinal axis of rotation disposed to extend transversely in reference to a corresponding first,  
21 vertical, plane of a corresponding handle portion;

22          each grooved roller element of said first and second grooved roller elements groups  
23 comprising a circumferential groove disposed transversely in reference to a corresponding  
24 longitudinal axis of a corresponding grooved roller element;

25          (c) for each grooved roller element, a shaft structure configured to be disposed in a  
26 corresponding grooved base portion and configured to mount a corresponding grooved roller in a

corresponding grooved base portion; and

(d) a single elastic strand element configured to expand upon being pulled by a force of pull and configured to contract upon release of a force of pull;

said single elastic strand element being configured to be selectively disposed about said first group of at least four grooved roller elements of said first handgrip and said second group of at least four grooved roller elements of said second handgrip and between said first handgrip and said second handgrip in a first formation and in at least one other formation;

said first formation comprising eight portions of said single elastic strand element being disposed about said first group of at least four grooved roller elements of said first handgrip and about said second group of at least four grooved roller elements of said second handgrip, and between said first handgrip and said second handgrip;

said at least one other formation comprising four portions of said single elastic strand element being disposed about at least two grooved roller elements of said first group of at least four grooved roller elements of said first handgrip and about at least two grooved roller elements of said second group of at least four grooved roller elements of said second handgrip, and between said first handgrip and said second handgrip.

2. The exercise device according to claim 1, wherein:

said handgrips comprise plastic molded structures.

3. The exercise device according to claim 2, wherein:

said handgrips comprise a first molded portion and a second molded portion.

4. The exercise device according to claim 2, wherein:

said elastic element comprises a tubing material equivalent to THERABAND material.

5. A kit for performing physical workout exercises, said kit comprising:

(A) an expander type exercise device for use in performing physical workout exercises

3 by a user, said exercise device comprising:

4 (a) a first handgrip and a second handgrip;

5 each handgrip comprising a handle portion configured to be grasped by a hand  
6 of a user;

7 each handle portion comprising at least one mounting portion configured and  
8 disposed to removably dispose a guide element;

9 (b) at least one guide element;

10 each said at least one guide element being configured to be removably  
11 disposed in said at portion configured and disposed to removably dispose a guide  
12 element, of a corresponding handle portion of each said first handgrip and said second  
13 handgrip;

14 (c) for each said at least one guide element, at least one structure configured  
15 to dispose a corresponding guide element for rotation at a corresponding handgrip;  
16 and

17 (d) an elastic element configured to be disposed as an endless band about a  
18 respective guide element of said first handgrip and also about a respective guide  
19 element of said second handgrip to permit expansion and contraction of said elastic  
20 element between said first handgrip and said second handgrip upon performing  
21 physical workout exercises; and

22 (B) a structure configured to be secured at one of: a wall and a door of a room;

23 said structure also being configured to connect a handgrip for performing physical exercises.

1 6. The kit according to claim 5, comprising:

2 at least one of (a) and (b), wherein in (a) and (b) comprise:

3 (a) fasteners to secure a structure configured to be secured at one of: a wall  
4 and a door of a room; and

5 (b) an arrangement to connect a handgrip to a structure configured to be  
6 secured at one of: a wall and a door of a room.

7. An expander type exercise device for use in performing physical workout exercises by a user, said exercise device comprising:

- (a) a first handgrip and a second handgrip;  
each handgrip comprising a handle portion configured to be grasped by a hand of a user;  
each handle portion comprising at least one mounting portion configured and disposed to removably dispose a guide element;
- (b) at least one guide element;  
each said at least one guide element being configured to be removably disposed in said at least one mounting portion configured and disposed to removably dispose a guide element, of a corresponding handle portion of each said first handgrip and said second handgrip;
- (c) for each said at least one guide element, at least one structure configured to dispose a corresponding guide element for rotation at a corresponding handgrip; and
- (d) an elastic element configured to be disposed as an endless band about a respective guide element of said first handgrip and also about a respective guide element of said second handgrip to permit expansion and contraction of said elastic element between said first handgrip and said second handgrip upon performing physical workout exercises.

8. The exercise device according to claim 7, wherein:

said at least one structure configured to dispose a guide element comprises a pin structure.

9. The exercise device according to claim 8, wherein:

said at least one guide element comprises a substantially cylindrical pulley structure that is configured to be removably and rotatably mounted by a corresponding pin structure in a corresponding handle portion; and

said cylindrical pulley structure comprises a hemispherical groove configured to guide at least a portion of said elastic strand element.

10. The exercise device according to claim 9, wherein:

2 a group of four pulleys is disposed in a respective handgrip.

1 11. The exercise device according to claim 10, wherein:  
2 one of: said first handgrip and said second handgrip, comprises a plastic molded structure.

1 12. The exercise device according to claim 11, wherein:  
2 one of: said first handgrip and said second handgrip, comprises a first molded portion and a  
3 second molded portion.

1 13. The exercise device according to claim 12, wherein:  
2 said elastic element comprises an elastic tubing material.

1 14. The exercise device according to claim 13, wherein:  
2 said tubing material is equivalent to THERABAND material.

1 15. The exercise device according to claim 14, wherein:  
2 one of: said first handgrip and said second handgrip, comprises hand-supporting structures.

1 16. The exercise device according to claim 15, wherein:  
2 one of: said first handgrip and said second handgrip, comprises a notched portion.

1 17. The exercise device according to claim 16, wherein:  
2 one of: said first handgrip and said second handgrip, comprises one of (a) and (b), wherein  
3 (a) and (b) comprise:

4 (a) a hollow cross-section; and

5 (b) a solid cross-section.

1 18. The exercise device according to claim 17, wherein:

said mounting portion comprises a first wall and a second wall remote from said first wall to dispose at least one cylindrical pulley structure there between.

19. The exercise device according to claim 7, comprising at least one of:

(a) said at least one structure configured to dispose a guide element comprises a pin structure;

(b) said at least one guide element comprises a substantially cylindrical pulley structure that is configured to be removably and rotatably mounted by a corresponding pin structure in a corresponding handle portion; and

said cylindrical pulley structure comprises a hemispherical groove configured to guide at least a portion of said elastic strand element;

(c) a group of four pulleys is disposed in a respective handgrip;

(d) one of: said first handgrip and said second handgrip, comprises a plastic molded structure;

(e) one of: said first handgrip and said second handgrip, comprises a first molded portion and a second molded portion;

(f) said elastic element comprises an elastic tubing material;

(g) said tubing material is equivalent to THERABAND material;

(h) one of: said first handgrip and said second handgrip, comprises hand-supporting structures;

(i) one of: said first handgrip and said second handgrip, comprises a notched portion.

(j) one of: said first handgrip and said second handgrip, comprises one of (a) and (b), wherein (a) and (b) comprise:

(a) a hollow cross-section; and

(b) a solid cross-section; and

(k) said mounting portion comprises a first wall and a second wall remote from said first wall to dispose at least one cylindrical pulley structure there between.

20. The use of the exercise device according to claim 7.